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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/689,734

10/22/2003

Henri Galliou

GALLIOU2

3995

1444

7590

10/13/2004

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EXAMINER

PAIK, SANG YEOP

ART UNIT

PAPER NUMBER

3742

DATE MAILED: 10/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/689,734	<b>Applicant(s)</b> GALLIOU	
	<b>Examiner</b> Sang Y Paik	<b>Art Unit</b> 3742	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \* c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 4, 5 and 11-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderl et al (US 4,052,590) or Dills (US 3,885,128) in view of Sawyer (US 2,916,594) or Mudge (US 2,816,200).

Anderl et al or Dills shows an electric appliance including a hot plate with a sheathed heating element coupled to the hot plate for heating the hot plate, the metal sheathed heating element having a resistance wire disposed therein. However, neither Anderl et al nor Dills shows that the resistance wire is made of nickel and iron as the two principal elements that has the claimed temperature coefficient.

Sawyer shows that it is well known in the art to have a metal tubular sheathed heater having a coiled resistance wire made of a nickel-iron alloy wire. Mudge also shows a metal tubular sheathed heater having a coiled resistance wire made of up to 90 % nickel and up to 65% iron. In view of Sawyer and Mudge, it would have been obvious to one of ordinary skill in the art to adapt Anderl et al or Dills with the resistance wire made of nickel and iron as the two principal elements since such elements are known to provide a good resistance heating to produce a high temperature and to maintain a uniform heating. The recited temperature

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coefficient is inherently satisfied since the recited composition of the wire is physically same as that of the prior art.

With respect to the recitation of the means for aiding thermal exchange comprising grooves is shown by Anderl et al which shows a groove formed on the hot plate to encase a heating element which is compressed therein

With respect to claims 16-18, Dills shows a diffusion plate made of aluminum or copper provided between the hot plate and the heating element

3. Claims 1-3 and 6-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderl et al or Dills in view of Sawyer or Mudge as applied to claims 4, 5 and 11-20 above, and further in view of Lennox (US 2,499,961).

Anderl et al or Dills in view of Sawyer or Mudge shows the electric appliance claimed except that the wire resistance is created by its selected length and selected diameter

Lennox shows a sheathed heater having a coiled heating element where the wire resistance is selected by its diameter. Lennox teaches that the wire with a smaller diameter generated less heat than with the wire with bigger diameter. In view of Lennox, it would have been obvious to one of ordinary skill in the art to adapt Anderl et al or Dills, as modified by Sawyer or Mudge, with the selected length and diameter to create the desired wire resistance to achieve the desired heating capacity.

Also, with respect to the claimed diameter of wire that is greater than .7 times the tubular envelope, it would have been obvious to one of ordinary skill in the art to modify the diameter of the wire resistance including the desired range to increase the heating capacity since Lennox teaches that bigger the diameter, bigger the heating capacity.

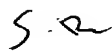
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With respect to claims 8 and 10, since power is proportionally related to the resistance of wire according to the Ohm's law, it would have been obvious to provide the power according to the resistance of the wire resistance to meet the desire power capacity.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sang Y Paik whose telephone number is 703-308-1147. The examiner can normally be reached on M-F (9:00-4:00) First Friday Off.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Sang Y Paik  
Primary Examiner  
Art Unit 3742

syp